

Update on the 4pi Calibration System

The 4pi Group

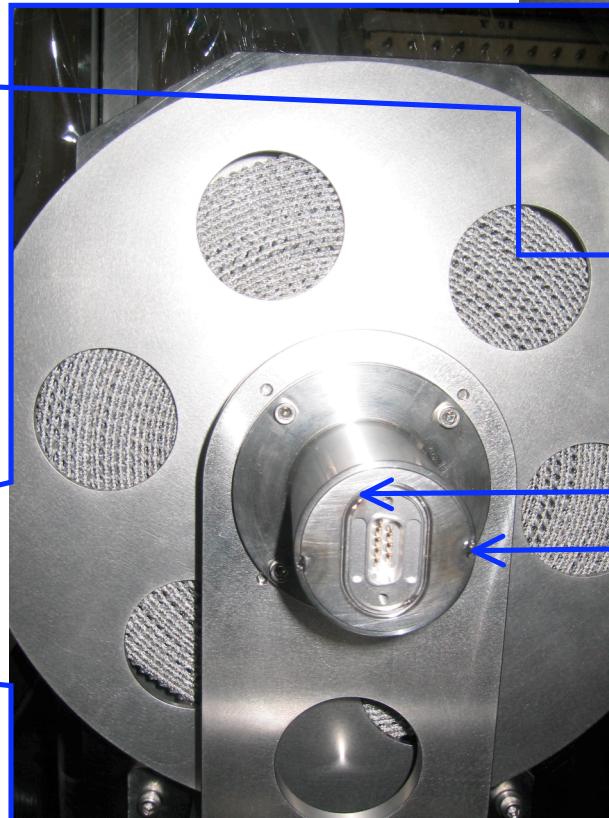
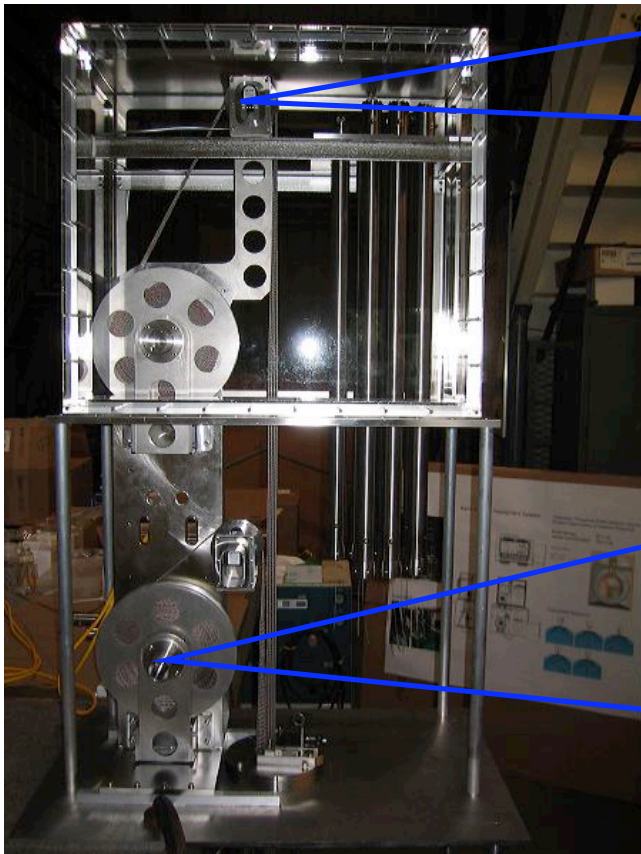
July 21, 2004

In-Glovebox Feedthroughs

- complete

Ceramaseal 16800-01-W (slip ring)

Ceramaseal 16801-01-W (encoder)

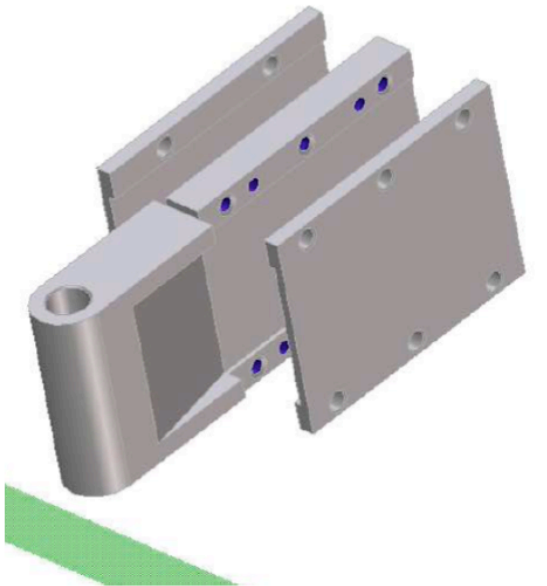


feedthroughs will be completely welded after testing

Re-Design of Cable Attachment

- Re-design complete
- Needs full-scale test

stainless cable clamp

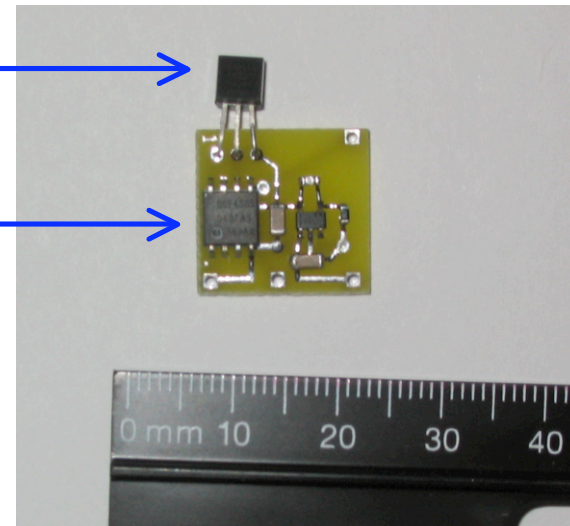


Instrumentation Unit

- prototype being built
- uses total of 3 wires in control cable
- 3 functions:
 1. reads out pressure sensor
 2. controls LEDs
 3. measures temperature

Thermometer (will be connected to heat sink)

ADC



[Thermometer](#)
[ADC](#)
[Interface](#)

http://www.maxim-ic.com/quick_view2.cfm?qv_pk=2812&ln=
http://www.maxim-ic.com/quick_view2.cfm?qv_pk=2921&ln=
http://www.ibuttonlink.com/Link_Details.htm

Pressure Sensor Tests

- Tests in water show accuracy of ~ 1.3 cm in water at a depth of 10 m.

See

http://kmheeger.lbl.gov/kamland/4pi/instrumentation/pressure_sensors/pressure_test_report_072004.pdf

for preliminary report